

### **DRAWING AMENDMENTS**

**In the Drawing:**

The drawings were objected to for failing to show every feature of the invention as specified in the claims. Please replace Drawing Sheet(s) 1/4, 2/4, and 3/4, Figure(s) 1, 2, 3, 4, 5A, and 5B with replacement Drawing Sheet(s) 1/4, 2/4, and 3/4, Figure(s) 1, 2, 3, 4, 5A, and 5B. Applicant also submits annotated red-lined drawing pages reflecting the changes. Applicant provides formal corrected drawings to be entered if the proposed changes are accepted by the Examiner.

### **REMARKS**

This Application has been carefully reviewed in light of the Office Action mailed April 21, 2006. At the time of the Office Action, Claims 1-20 were pending in this Application. Claims 1-20 were rejected. Claims 1-6, 10, 11, 13, 15, and 16 have been amended. Claims 8-9 have been cancelled without prejudice or disclaimer. Applicant respectfully requests reconsideration and favorable action in this case.

#### **Objections under 37 CFR 1.83(a)**

Examiner has objected to the drawings for not showing every feature of the invention specified in the Claims under 37 CFR 1.83(a). Applicant submits replacement drawing sheets which now show the switching means even though Applicant believes that a person skilled in the art would have understood the invention as described without any problems. The present invention is directed to a circuit arrangement for sequential classification as described. The prior art is disclosed in detail and, thus, a person skilled in the art will know and understand the relevant background art. Therefore, the drawings are only showing the circuit necessary to perform the classification/evaluation. There is no need for a person skilled in the art to include the engine in the drawings. All structural details essential for a proper understanding are shown in the drawings.

#### **Rejections under 35 U.S.C. § 112**

Claims 1, 4, 6, 13, 14, 18 and 20 were rejected by the Examiner under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Applicant amends Claims 1-6, 10, 11, 13, 15, and 16 to overcome these rejections and respectfully requests full allowance of Claims 1-6, 10, 11, 13, 15, and 16 as amended.

Claims 1-6, 8, 9, 10, 11, 13, 20 were rejected by the Examiner under 35 U.S.C. §112, second paragraph, as being indefinite and failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant respectfully disagrees. A person skilled in the art would readily recognize how the switching means have to be realized and, thus, would not have any problems in understanding the present invention.

Applicant would like to bring to the attention of the Examiner that the present invention is directed to an engineer who designs classification circuits. To further prosecution, Applicant however amended the drawings, in particular Figs. 1, 3, 5A, and 5B, to show the switching means as described in the specification.

To this end, Fig. 3 showing the prior art now includes a first and second switch as switching means 18. The original specification states that switches are provided to couple the resistor 11 with ground and with the resistor network 321, 322, 323. The specification particularly states that the resistor 11 is “... *connected on one side, by switching means not shown, to ground 15. On the other side it is connected to a series circuit of voltage divider resistors 321, 322 and 323...*” (emphasis added) See specification page 13, line 17-19. Thus, Fig. 3 now shows these switches. No new matter has been added. With respect to Fig. 1, the specification states: “*Instead of the voltage divider circuit according to the prior art, a single reference or measuring resistor 12 is connected here in parallel to the calibration resistor to be recorded in each case.*” See page 14, lines 24-26. Thus, the switching means would be applied in a similar way as shown in Fig. 3. The amendments to Fig. 1, therefore, now also show the switches 18. With respect to Figs. 5A and 5B, Applicant amended these drawings as described in the original specification. The specification states: “*As can be easily seen, the entire calibration network can be connected to the calibration resistor of interest in the most simple way with the switching resources not shown a...*” See page 17, lines 1-3. The simplest way to connect a resistor to a circuit is a simple switch as now shown. Thus, no new matter has been added. Applicant believes that all necessary elements are now shown in the drawings as original disclosed.

With respect to claim 4 the Examiner stated that the drawings fail to show the diodes. Applicant respectfully disagrees. Fig. 5A clearly shows diodes 163a...163h. For a better overview, Fig. 5A only shows a single resistor 11 coupled with diode 163a. Each other resistor is coupled with the remaining diodes 163b...163h in exactly the same way. Thus, there is no need to show these resistors and associated switches. The specification states: “*To improve clarity the calibration resistors to be connected to the decoupling diodes 163b-h are not shown in the diagram. The other components correspond to the relevant components with the same reference character in Figs. 1, 2 and 4.*” See page 17, lines 5-8. Applicant believes

by showing one resistor 11 coupled with the network, a person skilled in the art will not have any problems understanding how the remaining resistors have to be connected.

With respect to claim 6, the amended specification states: *"As can be easily seen, the entire calibration network can be connected to the calibration resistor of interest in the most simple way with the switching resources 18 able to be designed very simply and except for decoupling diodes 163a-h, all components of the calibration network only having to be simple designs."* As the circuit shown in Fig. 5A performs the same function as the prior art in a more efficient and simple way, some of the description associated with Fig. 1 also applies to Fig. 5A. The specification, thus, further states *"After recording a calibration resistor the switching means switch to a next calibration resistor."* See page 14, lines 13-14. A person skilled in the art will have no problems understanding that through a switch as shown in the Figs. 1, 3, 5A, and 5B, any specific calibration resistor 11 can be connected to the measurement circuit. Thus, contrary to the Examiner's conclusion, claim 6 is very well supported by the specification.

With respect to claims 13, 14, 18 and 20. The specification states *"To avoid additional cabling the calibration resistor is often installed in conjunction with an activation coil of the valve or, with bipolar control, between the activation coils, in which case switching means, in particular transistor circuits, are provided which switch backwards and forwards between an initialization configuration and an operating configuration of the overall circuit. The calibration resistance can thus be recorded when the coil control is switched off by the evaluation circuit present in the initialization configuration."* Page, 3, line 24 - page 4, line 3. Thus, the calibration resistors are integrated in an injection valve whereby the value of each resistor is chosen according to the specific characteristic of the injection valve. This characteristic depends on manufacturing tolerances and needs to be evaluated later by means of an evaluation circuit. The present invention is not concerned with details of how these resistors are integrated within an injection valve because this is well known in the art. Therefore, a person skilled in the art does not need an explanation of how this can be accomplished. The present invention concerns the evaluation circuit proper and not the injection valve or any type of switch which is used to couple the calibration resistor within an injection valve. As stated above, this invention is directed to a person skilled in the

art which understands how such evaluation circuits according to the prior art as exemplary shown in Fig. 3 work. The specification therefore concentrates on the new inventive part which is directed to the evaluation circuit proper as shown in Figs. 1, 2, 4, 5A, and 5b. Thus, Applicant believes that everything essential to the present invention is properly shown and disclosed. Thus, Applicant believes that all claims are allowable and respectfully requests allowance of the present application.

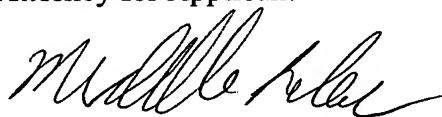
**CONCLUSION**

Applicant has made an earnest effort to place this case in condition for allowance in light of the amendments and remarks set forth above. Applicant respectfully requests reconsideration of the pending claims.

Applicant believes there are no fees due at this time, however, the Commissioner is hereby authorized to charge any fees necessary or credit any overpayment to Deposit Account No. 50-2148 of Baker Botts L.L.P.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicant's attorney, Andreas Grubert, at 512.322.2545.

Respectfully submitted,  
BAKER BOTTS L.L.P.  
Attorney for Applicant



Michelle M. LeCointe  
Reg. No. 46,861

Date: July 20, 2006

**SEND CORRESPONDENCE TO:**  
BAKER BOTTS L.L.P.  
CUSTOMER ACCOUNT NO. **31625**  
512.322.2545  
512.322.8383 (fax)

ATTORNEY DOCKET  
071308.0473

PATENT APPLICATION  
10/696,705

14

**APPENDIX**

**Circuit Arrangement and Method for  
Sequential Classification of a Plurality of  
Controllable Components**

Inventor: Stephan Bolz

Attorney Docket.: 071308.0473

Annotated Page 1 of 4

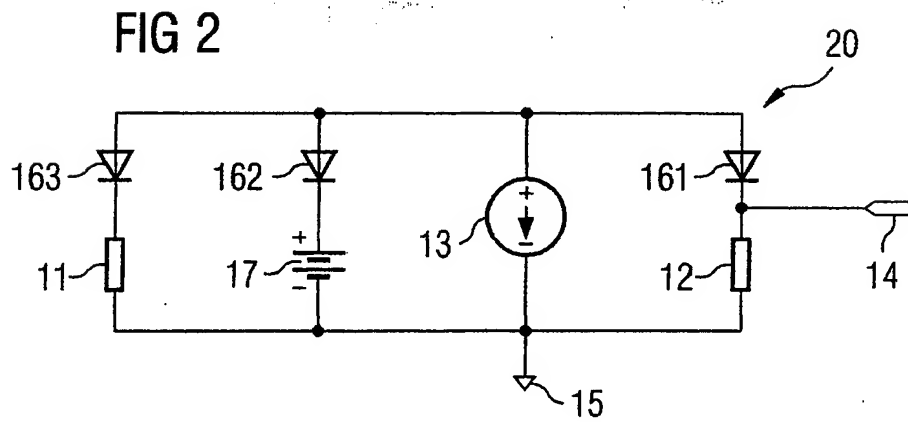
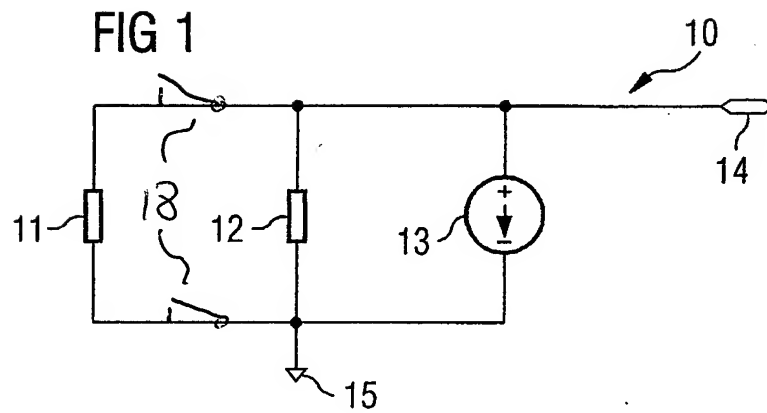




FIG 3 Prior Art

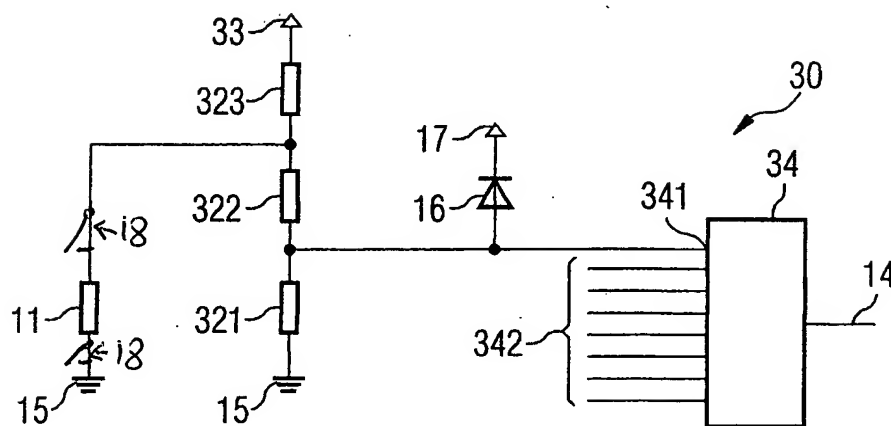
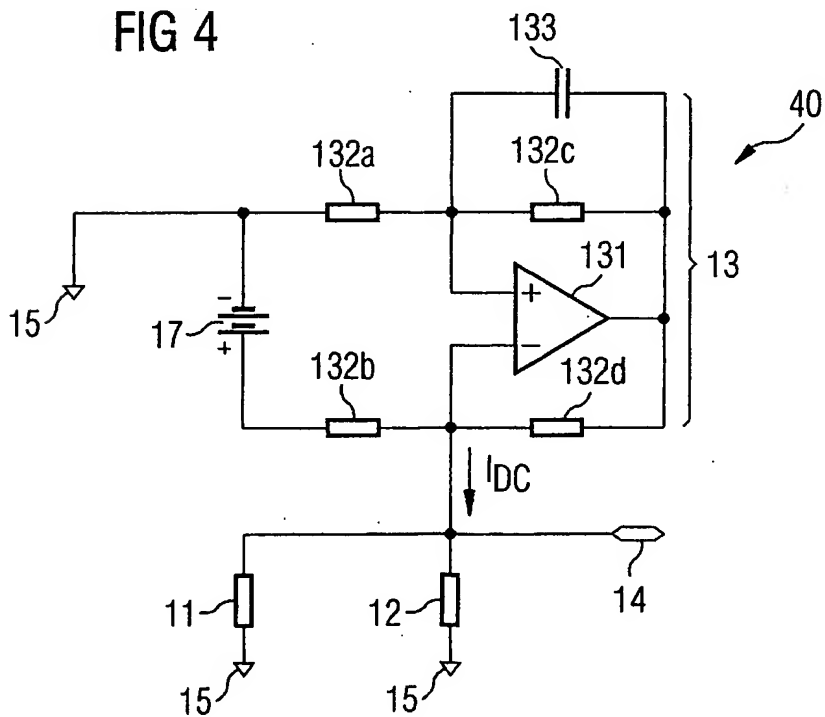


FIG 4



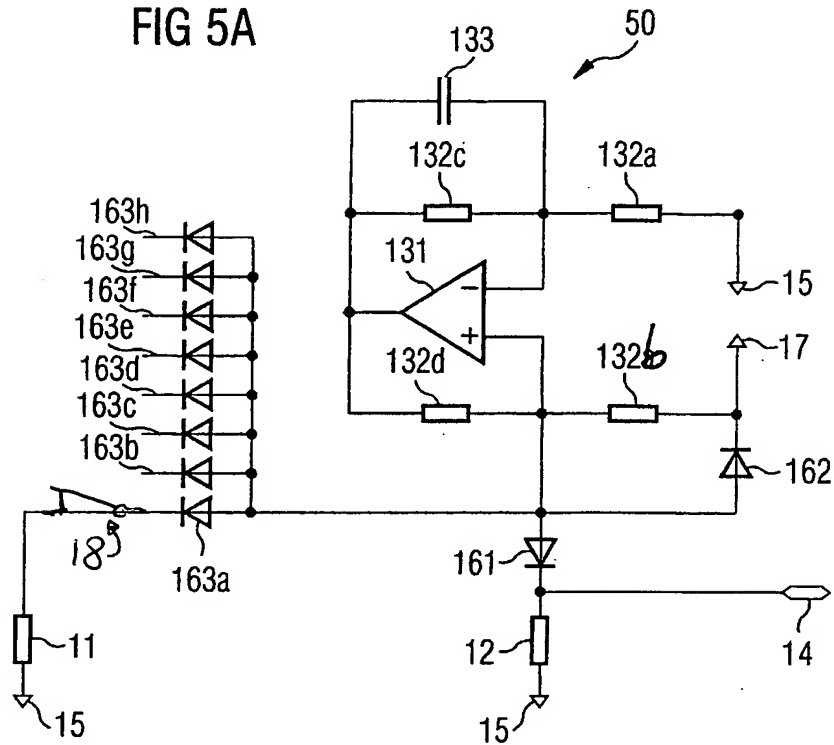
**Circuit Arrangement and Method for  
Sequential Classification of a Plurality of  
Controllable Components**

Inventor: Stephan Bolz

Attorney Docket.: 071308.0473

Annotated Page 3 of 4

**FIG 5A**



**FIG 5B**

